

STANDARD SECTOR INDICATOR CODE: HE-077	Households Using a Properly Maintained Improved Cookstove: Number of households having a properly maintained improved cookstove that is being used for at least 90% of household cooking needs	
HEALTH SECTOR	Sector Schematic Alignment Health <ul style="list-style-type: none"> • Project Area: Environmental Health • Project Activity Area/Training Package: Improved Cookstoves Environment Sector <ul style="list-style-type: none"> • Project Area: Natural Resource Planning and Management • Project Activity Area/Training Package: Improved Cookstoves 	
Type: Intermediate-term Outcome	Unit of Measure: Households	Disaggregation: None

To be counted for this indicator the following criteria must be met:

- The household must include an individual who participated in a training on improved cookstoves held by the Volunteer/partner;
- The household must have installed an improved cookstove 3 months previously;
- 3 months after installation, the residents must report using their improved cookstove more than or equal to the amount of time other cookstoves, ovens, fires are utilized AND that it was used for at least 90% of all their cooking needs.
- The improved cookstove must also be properly maintained 3 months after installation; this is shown by meeting (demonstrates use and proper maintenance) 8 out of the 11 usage and maintenance criteria detailed in the cookstove tracking tool.

Definitions:

Proper Maintenance: is defined as meeting 8 out of 11 criteria that demonstrate proper use and maintenance at least three months after the first use (See tool for HE-077).

90% of cooking needs: the amount of time the improved cookstove is utilized must be 90% of all cooking time that requires a stove, oven, fire, etc. The remaining 10% of the time other stoves, ovens, fires may be utilized to prepare foods.

Improved Cookstoves – For this indicator, number of cookstoves counted will only be improved cookstoves that meet the following criteria outlined in the Peace Corps Improved Cookstoves Handbook:

- Desirable: appropriate for cooks’ needs and preferences, compatible within the cultural context.
- Accessible: available and enabling choice, affordable outright or otherwise (e.g. credit)
- Effective: actually reduce levels of indoor air pollution and fuel use. (a) consume at least 35 percent less fuel when cooking a typical meal than the traditional stove currently in use; (b) achieve a reduction in air contamination by use of a chimney for indoor stoves; and (c) achieve at least a 90 percent reduction in emissions or exposure, as confirmed by either a standard controlled cooking test or a kitchen performance test conducted in the country.
- Reliable: consistently performs as expected.
- Maintainable: easy to use and clean; spare parts and service available.

Rationale: The U.S. government is a global leader in the effort towards universal adoption of clean and efficient cooking solutions through its support of the Global Alliance for Clean Cookstoves and investment in the research and development of clean cooking solutions. According to the Global Burden of Disease Study published in Lancet, December 2012, exposure to cookstove smoke leads to roughly 4 million premature deaths each year – or one every 8 seconds.

Harmful cookstove smoke is estimated to be the fourth worst health risk factor globally, second worst among women and girls and fifth worst among men and boys. It is the worst of the environmental risk factors affecting health (such as outdoor air pollution and unimproved water sources and sanitation), both globally and in poor regions. It is also the worst health risk factor in South Asia and second worst in most parts of Sub-Saharan Africa. Each year the effects of smoke from residential burning of wood and other basic fuels kill more people than HIV/AIDS, tuberculosis or malaria. Cookstove smoke contributes to a range of chronic illnesses and acute health impacts such as acute pneumonia in children under the age of five, cardiovascular disease, lung cancer, and chronic obstructive pulmonary disorders (COPD). A growing body of evidence suggests links to other conditions including tuberculosis and low birth weight. Studies have shown that infants whose smoke exposures were reduced by 90% had 50% less pneumonia.

Measurement Notes:

1. **Sample Tools and/or Possible Methods (for Peace Corps staff use):** Volunteers should use data collection tools to measure progress against project indicators. Please check PCLive for data collection tools. Once a tool has been developed, post staff should have a few Volunteers and their partners pilot it, and then distribute and train Volunteers on its use.
2. **General Data Collection for Volunteer Activities:** All Volunteer activities should be conducted with the intention of achieving outcomes – knowledge change (short-term), skills demonstration (intermediate-term), and behavioral changes (intermediate to long term) as defined by the progression of indicators within the objectives of a project framework. The progression of measurement for all Volunteer activities should begin with baseline data being conducted prior to the implementation of an activity (or set of activities), followed by documenting any outputs of the activities and then later at the appropriate time, measurements of specific outcomes (see the bullet on “frequency of measurement”).
3. **Activity-Level Baseline Data Collection:** This indicator builds off of indicators **HE-072: Trained People to Build Hand Washing Station and to Correctly Wash Their Hands**, and **HE-073: Trained to Construct and Maintain an Improved Cookstoves** as it measures the skill and knowledge needed to correctly build and maintain an improved cookstove to achieve health benefits. Therefore, baseline data collected in the form of a pre-test for HE-072 or HE-073 would apply to this indicator as well.

Because Volunteers are expected to implement relevant and focused activities that will promote specific changes within a target population (see the “unit of measure” above), taking a baseline measurement helps Volunteers to develop a more realistic snapshot of where individuals within the target population are in their process of change instead of assuming that they are starting at “0.” It also sets up Volunteers to be able to see in concrete terms what influence their work is having on the individuals they work with during their service. Please note that data collection is a sensitive process and so Volunteers will not want to take a baseline measurement until they have been able to do some relationship and trust-building with the person/people the Volunteer is working with, and developed an understanding of cultural norms and gender dynamics.

4. **Frequency of Measurement:** For reporting accurately on this outcome indicator, Volunteers must take a minimum of two measurements of the households in the target population reached with their activities. After taking the baseline measurement (described above), Volunteers should take at least one follow-on measurement with the same individual(s), typically after completing one or more activities focused on achieving the outcome in

this indicator and once they have determined that the timing is appropriate to expect that the outcome has been achieved. Please note that successful documentation of a behavior change or new practice may not be immediately apparent following the completion of activities and may need to be planned for at a later time. Once Volunteers have measured that at least one individual has achieved the indicator, they should report on it in their next VRF.

Volunteers may determine to take more than one baseline and one follow-on measurement with the same individual (or group of individuals) for the following valid reasons:

- Volunteers may want to measure whether or not any additional individuals initially reached with activities have now achieved the outcome in the indicator, particularly for any activities that are on-going in nature (no clear end date);
- Volunteers may want to enhance their own learning and the implementation of their activities by using the data collected as an effective monitoring tool and feedback mechanism for the need to improve or increase their activities;
- A Peace Corps project in a particular country may choose to increase the frequency of measurement of the indicator and Volunteers assigned to that project will be required to follow in-country guidance.

In all cases, any additional data collection above the minimum expectation should be based on the time, resources, accessibility to the target population, and the value to be gained versus the burden of collecting the data. Following any additional measurements taken, Volunteers should report on any new individuals achieving the outcome in their next VRF.

- 5. Definition of Change:** The minimum change to report against this indicator is a household having a properly maintained improved cookstove that is being used for at least 90% of household cooking needs as compared to what was measured initially at baseline. In the case of this indicator, if the person the Volunteer/partner works with already uses a properly maintained improved cookstove for at least 90% of cooking needs before beginning to work with the Volunteer/partner, then the Volunteer would not be able to count him/her for this activity because the Volunteer's work did not actually lead to the desired change. However, if as a result of working with the Volunteer/partner, the household decided to cook with a properly maintained cookstove for 90% of the cooking needs, that would count because the Volunteer's work influenced the household's habits.
- 6. General Reporting in the VRF:** The "number achieved" (or numerator) that Volunteers will report against for this indicator in their VRFs is the number of households having a properly maintained improved cookstove that is being used for at least 90% of household cooking needs after working with the Volunteer/partner. The "total number" (or denominator) that Volunteers will report on for this indicator in their VRFs is the total number of households who participated in the activities designed to meet this indicator.
- 7. Reporting on Disaggregated Data in the VRF:** This indicator is not disaggregated.

Data Quality Assessments (DQA): DQA are needed for each indicator selected to align with the project objectives. DQAs review the validity, integrity, precision, reliability, and timeliness of each indicator. For more information, consult the Peace Corps MRE Toolkit.

Alignment with Summary Indicator: Behavior Change to Improve Health